STRUCTURE S-154C

This structure is a single-barrel, concrete pipe culvert located through L-D4, about 5 miles west of Okeechobee. Control is effected by a submersible gate mounted on a concrete box inlet structure.

PURPOSE

This structure maintains the optimum upstream water control stages; it passes the design flood without exceeding the upstream flood design stage. A downstream flap valve prevents backflow from Lake Okeechobee during excessive stages in the lake caused by flood or wind tides.

OPERATION

This structure is operated to maintain an optimum headwater elevation of 16.0 feet. It is opened full during hurricane alerts in order to pass the maximum discharge possible.

FLOOD DISCHARGE CHARACTERISTICS

DESCRIPTION OF STRUCTURE

Type <u>concrete pipe culvert</u>

Number of barrels 1

Diameter of barrel 72 inches

Length of barrel 136 feet

Flow line elevation 8.0 feet

Service bridge elevation 24.0 feet

Water level which will bypass structure <u>35.0</u> feet

Inlet Structure

Type <u>concrete box</u>

Width <u>8.0 feet</u>

Height <u>18.0 feet</u>

Sill Elevation <u>14.0 feet</u>

Invert Elevation <u>6.0 feet</u>

Control Gate

Number <u>1</u>

Type <u>vertical lift gate</u>

Size <u>5'-6" high by 8'-10" wide</u>

Control <u>manual</u>

Lifting Mechanism <u>hand operated, pedestal mounted lift</u>

Top elevation of gate, full open 19.0 feet

Bottom elevation of gate, full open 17.9 feet

Source of power <u>manual</u>

ACCESS from State Road #70 at a point about 1½ miles east of C-38 via

Herbert Hoover Dike Road on the crest of L-D4

HYDRAULIC AND HYDROLOGIC MEASUREMENTS

Water Level upstream and downstream staff gauges only

Gate Position Recorder none

DEWATERING FACILITIES (per barrel) <u>none</u>